The Public Health Conference on Records and Statistics

meeting jointly with

The National Conference on Mental Health Statistics

HIGHLIGHTS OF THE 14TH NATIONAL MEETING

Tearsheet requests to Office of Information, National Center for Health Statistics, Health Services and Mental Health Administration, Room 8-20, Parklawn Building, 5600 Fishers Lane, Rockville, Md. 20852.

Every 2 years the National Center for Health Statistics brings together the registrars and health statisticians from the official health agencies across the country for a week of mutual consultation and discussion on problems of major concern to health statistics staffs. These conferences are the national meetings of the Public Health Conference on Records and Statistics.

The 14th National Meeting, held in Washington, D.C., June 12–15, 1972, differed in several ways from those that preceded it.

It was held jointly with the National Conference on Mental Health Statistics. Thus it represented the first effort at collaboration on a large scale and in a formal way between the fields of mental health statistics and general health statistics.

It was the largest conference to date—the number of attendees has grown from 312 in 1964 to 600 in 1972.

It was more comprehensive than ever before. While not diminishing its primary interest in the basic partnership in the vital statistics registration system of the United States, the NCHS has broadened its commitment to public health in other aspects. In a sense the conference now provides a forum for all health statisticians, whatever their occupational focus.

The meetings included sessions on such topics as the role of health statistics in improving the health care system, role of statistics in improving the mental health care system, the definition and measurement of mental health, ambulatory care statistics, population trends having implications for health, family growth and health services, acceptability of birth records by Federal agencies, and health economics.

The National Center for Health Statistics will issue separate publications for each session, beginning the series in November 1972, and publish the entire proceedings of the conference in 1973.

Health Statistics and Health Care

Addressing the opening session, Dr. Vernon E. Wilson, Administrator of the Health Services and Mental Health Administration, reminded the audience that improving the health care delivery system is the primary mission of HSMHA, and he posed a question: How do we make a relatively small resource of dollars and people serve most effectively to bring about changes in the total health enterprise?

What the health industry has, he said, is a health statistics "system" characterized by duplication of effort, varying definitions, noncomparability of the data, "a needless and wasteful hit-and-miss, every man for himself approach. There has to be a more cost-effective way of obtaining the data we need, and there is, the Cooperative Federal-State-Local Health Statistics System."

To illustrate, Wilson contrasted hospital record room activities under the present setup with those that would obtain under the cooperative system now in its developmental stage.

"The need for information is evidenced by the vast amount of data collection that goes on. The hospital record rooms groan under the load—forms which provide information for third party payors, public and private; forms for the abstracting services which feed back statistics for institutional management; forms for possibly hundreds of studies launched by State governments, hospital planning councils, regional medical programs, church groups, and many more. In addition, there is the Federal effort which produces statistics on utilization under Medicare and the NCHS Hospi-

tal Discharge Survey, an attempt to cover the entire population."

Under the developing cooperative system which Wilson called our strategy for improving baseline data, "everyone concerned—Federal and State agencies, planning councils, voluntary organizations—would use a basic patient abstract form and a common claims form. The hospital would prepare this core information once, returning it to a central agency—State, area, or regional. This agency, using previously agreed-upon classifications and processing techniques, would provide computer tapes for the use of all legitimate consumers—local, State, and Federal. To assure confidentiality, no information identifying individuals would be on the tapes."

In time, the cooperative system will comprise the different data collection components—ambulatory and long-term care, health facility and health manpower inventories, household interview and other survey systems, to name a few—required to provide continuing statistical evidence covering the health of the entire population and the entire health industry.

Wilson emphasized the difficulties that lie ahead. Working out common definitions and standards will be most complex and difficult. Some existing systems will need to change over and in some instances give up what they now are doing to a central statistical agency; everyone will have to give a little.

He also warned against the idea that data alone make choices automatic. "There are times, I am sure, when it is better public policy, or better program management to over-rule or ignore the hard evidence, but even these decisions should be made with the facts clearly understood."

Finally, he urged that "We all remember and understand why we build. The statistics are not an end in themselves. They are only worthwhile when they are used with purpose—as an aid to policy making, program planning and management, evaluation, public education, and research. Every data system's value must be demonstrated before it is installed. Only in this way can we be sure of avoiding a statistical 'overkill.' "

Dr. Kerr L. White, professor of medical care and hospitals, School of Hygiene and Public Health, Johns Hopkins University, spoke on "Priorities for Health Services Information."

He reviewed activities relating to health information systems during the past 6 years. Regarding accomplishments, he noted that there has been a recognition that large-scale social enterprises require reliable information for decision making and planning, if not for management; that a clear national commitment has been made to create Federal-State-local health statistics systems, including those bearing on mental health problems; that a start has been made on the promulgation of uniform definitions and classifications that can be used for hospital discharge abstract systems and for ambulatory medical care record systems; and the now widespread recognition by clinicians that it is the patient's problem that matters, rather than the diagnosis attached to his disease, his visits, or admissions.

As to principles that should guide the health care establishment in the immediate future and determine priorities for data collection, White said there should be a political commitment to the enunciation of national health policies. An associated need is a health policy research and analysis capability within the Office of the Secretary of Health, Education, and Welfare.

Also, we need to understand the differences between data, information, and intelligence. Describing the final product, intelligence, White said, "For example, if age-sex standardized rates show that patients admitted to a hospital with cardiac failure who have not seen a physician for over a year stay twice as long as those who have seen a physician, or if the age-sex standardized case fatality rates for patients in hospitals of 50 beds or less are twice that for those in hospitals of 500 beds or more, the policy analysts will begin to get some insight into the working of our health care arrangements and into the possible benefits of improved referral arrangements or even of regionalization of hospitals."

White said that we need a posture of leadership and of decision making at Federal, State, and local levels that recognizes the need for clear articulation of health policies, based on the analysis of intelligence generated by information systems designed by well-trained health statisticians and health care administrators—tied to the coordinated Federal-State-Local Health Statistics System.

The first priority for data collection, White stated, would be through the universal requirement that all hospitals participate in a regional discharge system. Such an arrangement would provide the single most powerful method of examining the work of hospitals in relationship to their effectiveness and efficiency.

The second priority he assigned to developing information about ambulatory medical care—the situation in which the bulk of medical practice occurs and the arena of greatest concern to the consumers. He would then give high priority to development of management information systems for the health maintenance organizations. Finally, White urged increased financial support and large-scale improvement in the training of health statisticians.

"We urgently need a larger cadre of professionally trained health statisticians who are familiar with the operations of health care institutions. with modern principles of communications science, management science, and information systems as applied to large-scale social and industrial enterprises and who are also familiar with contemporary thinking about health care organizations and problems. If we could double the ranks of those present today, we could evolve a national health intelligence system that could exert more constructive influence on our health care system than the mere provision of more money and more doctors."

Theodore D. Woolsey, director, NCHS, discussed "Using Statistics in Health Planning and Decision Making."

He stated his long-held belief that if the producers of statistics would pay more attention to studying the uses being made of their product—the way people use statistics—they could do a better job of planning their work.

As an aid in this direction, the NCHS is proposing establishment of a health data use laboratory as part of the Center. The laboratory would catalog real life examples of appropriate uses of statistics by Federal, State, and local planners; would promote better uses of statistics through courses developed at the Center's Applied Statistics Training Institute; and would provide technical assistance in the field.

The dearth of research on how people use statistics may be in part the result of the statisticians' preoccupation with the techniques of data collection, processing, and analysis, Woolsey said. Another factor may be that such research is not a simple matter.

Discussing the difficulties, he cited a recent NCHS contract study which was confined to uses of the baseline types of NCHS statistics. The major problems, not really resolved, were four:

1. How does one define a "use?" To count and classify episodes of use one needs to define them, and this proved difficult.

2. Who of all those who see the data is the user? Which one should answer questions about the use?

3. In analyzing the experience of users, should the great variety of users be given varying weights according to their importance and, if so, how?

4. How does one get the user to describe his use in a way that will help us to improve the product?

One outcome of the study, Woolsey said, was a rudimentary classification of the kinds of purposes that users of health data have in mind. It was based on NCHS experience in responding to requests for statistics.

Woolsey mentioned three apparent trends in uses of statistics that have come to his attention: increasing demand for small area data for local planning purposes and program evaluation, statistics with elaborate cross-classification for use in mathematical deterministic or Monte Carlo type models, and statistics that unambiguously show the results of particular courses of action in health services to help policymakers make better choices. He thought these to be indicative of one general trend—an effort to bring more sophisticated management methods to the health field.

Finally, Woolsey echoed Wilson's warning against the idea that bodies of data permit automatic decision making, "although man manages his affairs better in the presence of quantitative information."

Mental Health Statistics

Dr. Morton Kramer, chief, Biometry Branch, Office of Program Planning and Evaluation, National Institute of Mental Health, chaired a plenary session on the role of statistics in improving the mental health care system.

He recalled that the focus of mental health statistics began to change rapidly in 1963, the year of the late President John Kennedy's message on mental retardation and mental illness. There followed the community mental health centers legislation, with its emphasis on population-based services.

Subsequently, 2,000 catchment areas were established in the United States. They provide the population base against which one can look at patterns of, and use of, services.

"The Role of Statistics in the Administration of

Mental Health Programs" was the topic of Robert E. Patton, deputy commissioner for local services, New York State Department of Mental Hygiene.

Patton said that mental health agencies need monitoring data—for instance, data on incidence and prevalence of various conditions in the population.

However, these statistics as they relate to mental health are difficult to obtain. A suicide prevention center can get data on the incidence of suicides from the vital statistics system, but most mental conditions cannot be measured satisfactorily in the general population.

Because problems of measurement and definition have proved stubborn obstacles to measurement of effectiveness of mental health programs, operational statistics assume additional importance.

The kinds of operational statistics needed in mental health programs are the same as those useful in general health programs, Patton said. They include facility data, personnel data, client data, service data, and fiscal data. These are service or activity data—but yet to be solved is the problem of getting them in a standardized way that covers all providers of service. However, Patton observed, even if we were able to describe all of the activities of all the service providers in a meaningful way, we would still not be able to measure effectiveness because that requires knowledge about outcome.

One would need to know what happened to the individual patient as a result of the activity, he said. What happened to the population? Has the incidence of depression been reduced? Did the client go back to work? Did the youngster get into a regular school classroom and make progress?

These kinds of questions cannot be answered by data that come as a byproduct of an operating system. It is easy to say that every operating agency should follow up its clients. But to do that, Patton believes, a mental health agency will need a data system that is independent of the one that is largely based on use of operating statistics.

While it is relatively cheap to get statistical data if they can be a byproduct—as, for example, in the Medicare statistical system—it is very expensive when a separate system such as the Health Interview Survey must be established and operated. Nonetheless, Patton concluded, followup or outcome data requires this kind of separate system.

Dr. William W. Jepson, director, Hennepin County Mental Health Center, Minneapolis, Minn., said that operational statistics are indispensable not only for the internal operation of a program but also for justification of funding.

He said that, simply for purposes of description, some statements must be made in terms of quantity or magnitude.

"A mental health program or facility cannot be seen. A site visitor may see the building, some of the staff, a few of the patients, and even a sample of activities, but there is no way for him to see the program. It is this program that the observer wishes to find out about. He will always make inquiry in terms of numbers of staff, numbers of visits, average length of stay, percent of transfers to State hospitals, per diem costs, proportions of direct, as contrasted to community services, staff-patient ratios, and the like."

These kinds of statistics can, of course, be used for decision making purposes, but description alone is an adequate reason for many of them.

In his own program, Jepson said, success in program expansion has resulted more from justification of funding for the existing program and of arguments for expansion based on costs and projected benefits than on any large survey of populations at risk or community needs.

Health Statistics and National Policy

First, said Dr. Harry P. Cain, assistant director for planning and evaluation, National Institute of Mental Health, the opportunity for statistics in the health and mental health fields actually to influence national policy and program decisions is increasing at a fast rate.

Second, to a substantial degree, whether or not this opportunity is grasped will depend upon how successfully and flexibly the statisticians can shape their products to fit the audience of policy and program decision makers.

In the past, he said, most major decision factors have been handled by and within the purview of financial management and budget offices—with a political input also—rather than revolving around planning and evaluation. And the budget and financial offices have leaned less heavily on statistics than has the planning and evaluation function.

However, in the recent past the influence of planning and evaluation on decision making has increased. This change is bringing into decision

making the heavier statistical reliance which has long been an important factor in planning and evaluation.

But statistics will not be considered, especially at the higher levels of authority in the Department of Health, Education, and Welfare or in any large organization, unless they are presented in a timely, clear, and very pointed fashion, Cain said. To do that, he believes, it may sometimes be necessary to sacrifice something of precision, caution, and comprehensiveness.

He cited a set of simple indicators which his staff is attempting. The first one, presented on a single page, has been seen and studied by many policy makers in the Department up to the Secretary. Thus it has had the attention of decision makers who would rarely, if ever, see the voluminous detailed statistics on which it is based.

In the discussion that followed, Patton stated that this sacrifice of precision represents a trade-off in terms of use of total resources. Precision costs money, staff, and time, and he thought there has to be a balance between the amount of precision that is needed for one purpose and that which is needed for another. "In an administrative and operational sense, I think you can tolerate greater imprecision than you can in, say, a scientific situation."

Fraudulent Birth Certificates

The extent and seriousness of the fraudulent record problem was documented in the session on acceptability of birth records by Federal agencies.

Edwin E. Coile, Security and Intelligence Branch, Immigration and Naturalization Service, Department of Justice, said that the number of illegal aliens apprehended has risen from less than 71,000 in 1960 to more than 400,000 in 1971. The number of aliens in an illegal status has probably increased proportionately.

In their efforts to avoid apprehension, these aliens seek documents that will establish their claims to U.S. citizenship. A birth certificate is the preferred document, and there is a thriving business in the production of counterfeit certificates and the theft of official blank certificates from State offices.

Coile said he had just heard that in California one can buy, for between $500 and $1,000, a package including a counterfeit birth certificate, a voter's registration, a citizen's I.D. card, a driver's license, a draft registration, a draft classification, and a Social Security card. These falsified documents, of course, play into the hands of all types of criminals.

William E. Duggan, chief of the Security Office, Passport Division, Department of State, said that his office has initiated a fraud orientation program to indoctrinate field personnel in ways of detecting fraud.

The Passport Division insists on embossed seals on birth certificates, Duggan said, because the seal makes it more difficult to reproduce the document photographically. He urged accountability control over blank birth certificate forms. When forms are stolen from State offices which do not number them, the registrar does not even know how many are missing. In States which number their forms, however, the registrar can say the stolen blanks run from such and such a number through another specific number. The identifying numbers are an important aid to the Passport Division in detecting the fraud.

Duggan mentioned that first class post offices now take passport applications, and the Passport Division plans orientation for the post office employees involved.

Population Phenomena

Donald E. Starsinic, chief, State and Local Estimates Branch, Population Division, Bureau of the Census, talked about significant trends in population growth and distribution in the 1960s.

Although the population grew by 24 million, the rate of growth was the slowest in the U.S. history, except for the depression years. The reason is an almost unbroken drop in the birth rate throughout the decade. At a time when the number of women of childbearing age is growing rapidly, not only the birth rate but the number of births is actually declining.

The economic stagnation that occurred in the late 1960s could not have been worse timed in relation to the changing age composition, Starsinic said. The reduction in job opportunities came at the time when the largest college graduating classes in U.S. history began to pour into the job market.

The complete leveling off of elementary school enrollment, with the prospect of further declines, has wiped out opportunities for careers in teach-

ing that only a few years ago seemed unlimited.

A highlight in migration was the tremendous increase of the Negro population and the decline of the white population in the large northern and western cities, Starsinic said. In 1920 the largest portion of the black population was located in the rural South. Now a majority of blacks live in the central cities of large metropolitan areas.

According to Starsinic, there was a net in-migration of almost 2 million whites to the South, which resulted in that region's experiencing net in-migration for probably the first time in the 20th century—even though the gains in white persons were offset somewhat by the loss of 1.4 million Negroes. The Great Lakes States were hit hard economically during the 1960s and showed net out-migration for the first time in several decades.

Another important demographic occurrence of recent years is the growth of the older population. Commenting on this, Starsinic said that the 1970 census counted slightly more than 20 million people 65 years of age and older. This increase represents a constituency of senior citizens far larger than the country has ever had before.

A striking aspect in the growth of the older population in recent decades has been the increased survival of women compared with men. As recently as 1940, the number of women in this age group barely exceeded men. But by 1970, there was an excess of some 3.2 million women 65 and older.

The northern States have a somewhat larger proportion of older persons than the national average, with the highest shares found west of the Mississippi and in New England. The South and the West fell below the average.

New York, with 2 million, leads all States in population 65 and over, and California is not far behind. But, Starsinic said, Florida is by all odds the State that first comes to mind when thinking about the location of senior citizens.

A substantial share of the heavy population growth that Florida has experienced since 1930 is accounted for by in-migration of the elderly. The State now leads by far in percentage of older population, 50 percent above the national average.

While the North was losing well over half a million net migration of older people during the 1960s, the South gained about 450,000 and the West 200,000.

Of the States that gained through this interchange, Florida is the leader by an impressive margin, both numerically and proportionally, dwarfing all other States in the impact of retirement-age migration on its population and economy.

Dr. Paul C. Glick, assistant chief, Population Division, Bureau of the Census, continued the discussion of population characteristics having implications for health.

Talking about marital status, especially of women, he said that the net effect of changes in first marriage, divorce, widowhood, and remarriage has been 900,000 fewer married women of all ages than would have been expected in 1971 if the marital status distribution by age had not changed since 1960.

As the declining birth rate accompanied this shortage of married women, the fertility rate dropped from 3.6 in 1960 to 3.3 in 1971.

This rate is about the same as the lowest completed fertility rate on record, 2.3 children for those women born in 1905 to 1909, Glick observed. Furthermore, the 1905–09 cohort achieved that low rate without benefit of present-day efficient means of contraception, liberal abortion laws, and urgings toward "zero population growth." The husbands of these older women experienced depression level unemployment while the wives were at the prime ages for completing their families.

Most striking was the finding in a 1971 survey of expected lifetime fertility that wives under age 25 expected to have an average of only 2.4 children by the end of their childbearing period. Unless these women change their minds about their family size, or have a significant number of unplanned births, Glick said, they will come close to achieving zero population growth.

In a session on family growth, Glick listed several questions which were asked for the first time in the 1970 census.

One of them related to how the first marriage ended. The answers, he said, will show how many people have been previously divorced or widowed but are now remarried. This knowledge will expand the Bureau's ability to show the characteristics of people whose marriages have been disrupted or have ended in death of a spouse.

Among the census statistics available for the first time, Glick mentioned a distribution of men and women of reproductive age by education, down to the county level, and data on interracial marriages, down to the State level.

The Census Bureau hopes to have a report on

marital selection and fertility, he said. This report would feature characteristics of the husband, cross-classified by the same characteristics of the wife—such as age, education, race, occupation, and income. Thus one could see what kind of men marry what kind of women, and vice versa, and what the relation of this marital selection is to social and economic characteristics, including fertility.

The Population Commission

A report on the President's Commission on Population Growth and the American Future was presented by Robert Parke, Jr., the Commission's deputy director.

Parke quoted from the Commission's capsule statement:

"In the brief history of this nation, we have always assumed that progress and the good life are connected with population growth. In fact, population growth has frequently been regarded as a measure of our progress.

"If that were ever the case, it is not now. There is hardly any social problem confronting this nation whose solution would be easier if our population were larger. Even now, the dreams of too many Americans are not being realized and others are being fulfilled at too high a cost.

"Accordingly, this Commission has concluded that our country can no longer afford this uncritical acceptance of the population growth ethic that 'more is better' and beyond that, after 2 years of concentrated effort, we have concluded that no substantial benefits would result from continued growth in the nation's population."

The Commission's perspective, Parke said, was based on its perception that its interest was not in population trends as such, but in population trends insofar as they impinge on the quality of life in the United States.

In examining the probable effects of alternative future population figures, the Commission was asking basically, suppose the population were to grow at a rate consistent with the three-child average family. Suppose, on the other hand, the population were to grow at a rate consistent with a two-child average family. What difference would it make?

Parke said that this question was posed to economists and resource experts, ecologists, and political scientists in a broad range of professions, asking them, from the point of view of their special knowledge, what difference it would make.

Some of the topics on which research was conducted were the economy; the impact on per capita income and on overall national economic growth; poverty; the labor force; individual business; resources and the environment; energy; the water supply; pollution; public service costs for education, health, and welfare; administration of justice; and national security.

There was a review of many aspects of the consequences of growth on the age structure, the family, population density and, to an extent, a treatment of the knotty problems associated with the racial and ethnic aspects of population change, Parke said.

Declaring there was no way he could tick off the results of all this study, he read the Commission's overall summary of its findings with regard to the impact of the alternative population future:

"Each one of the impacts of population growth —on the economy, resources, the environment, government, or society at large—indicates the desirability in the short run for a slower rate of growth, and when we consider these together, contemplate the ever increasing problems involved in the long run, and recognize the long lead time required to arrest growth, we must conclude that continued population growth—beyond that to which we are already committed by the legacy of the baby boom—is definitely not in the interest of promoting the quality of life in the nation."

But, the Commission said, while slower population growth provides opportunities, it does not guarantee that they will be well used. It simply opens up a range of choices we would not have otherwise.

The benefits of population stabilization will not appear automatically. Rather, Parke pointed out, the allocation of resources which are "saved" through slower population growth will be the result of public and private decisions made for the next several decades. It is the wisdom with which those decisions are made that will determine how much population stabilization actually works to improve the quality of life in this country.

The Commission's report, which was made public in March 1972, is available in paperback and will be published by the Government Printing Office. In addition, the Commission plans publication of the research reports it obtained from the many scholars and researchers who contributed to the study.